

FIRE-RESISTANT STRUCTURAL COMPOSITE MATERIAL

ABSTRACT OF THE DISCLOSURE

Fire-resistant structural composites are comprised of a phenolic resin system, reinforcing fibers and alumina tri-hydrate. The composites may be formed into structural or load-bearing parts, and are particularly suited for applications requiring high strength and a high degree of fire-resistance, such as in the automotive, aircraft, or ship-building industry. Optionally, a siloxane modifier may be added to the resin system to improve the flexibility and impact resistance of the composite.